Improving the Accessibility
of Informed Voting

A User Interface Design for
Citizen Engagement with
Local Government

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The story begins on November 8th, 2016.
I only knew 1 out of 67 questions on my voting ballot.
I voted on party lines, for 43 elections that I had never heard of.
I guessed on Senate Resolution 287, and I realized that I had let 286 other resolutions pass me by.

**PROPOSED CONSTITUTIONAL AMENDMENTS**

<table>
<thead>
<tr>
<th>- 1 -</th>
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<tr>
<td>Provides greater flexibility and state accountability to fix failing schools through increasing community involvement.</td>
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Senate Resolution No. 287  
Act No. 309  
Ga. L. 2015, p. 1498  

"Shall the Constitution of Georgia be amended to allow the state to intervene in chronically failing public schools in order to improve student performance?"

- YES
- NO
The Problem

There are no current solutions to help citizens make informed voting decisions for local government bills and elections.
I identified social, economic, and technological factors that influence citizen engagement [2].
I decided to study the user behavior of 18 to 24 year-olds as they have the lowest voter turnout in the nation [3].
Then I began a user-centered design process.

Need-finding
Card Sorting
First-Click Testing
Expert Evaluations
Usability Testing
I asked users to read SB 287 [3] and provide a summary of the bill.

“It takes me a few times to read it because it is visually difficult to do so” - User 6

“This is really interesting… I had no idea what all was in this bill” - User 3

“Can I annotate it?” - User 1
I asked users to compare their summary of SB 287 with the summary provided on the November 8th 2016 ballot.

“This summarization is clearly biased towards favoring charter schools” - User 3

“I never once saw the words ‘community involvement’ in the bill” - User 5

“There isn’t enough information here to make a decision” - User 6

Sample Size: 7
The Design Opportunity

Improving the usability of government bills may make citizen engagement and informed voting more accessible.
I gathered all of the usability issues identified during need-finding.

“A solution that opens the bill up to public comments would get ugly, I would just want a simple like or dislike” - User 1

“If you handed me a 200-page bill, I would ask you, where are the highlights?” - User 2

“If it wasn’t for this section of the bill, I might actually support it” - User 1

“I would want legislation references to be hyperlinked” - User 5

“I’ve no idea what opportunity school district is or would be” - User 2
I broke down each usability issue into potential website features. I then placed each feature on a card and organized them into 5 categories.

“A solution that opens the bill up to public comments would get ugly, I would just want a simple like or dislike” - User 1
I asked users to organize these cards to create their ideal website.

Card Sorting

Positive Feedback Button

Negative Feedback Button

Most important bill sentences

Bill Summary

Sample Size: 10
I identified common patterns between the sorts and created an initial website architecture for the first prototype.

First Click Testing

Sample Size: 7
I asked users to complete tasks using the prototype to validate the need-finding concepts.

Sample Size: 7

"I don’t really know what all I can do on this site" - User 5

"I don’t really know what the ‘unclear’ button would do" - User 5
I revised the prototype and presented it to a State Senator, a County Commissioner, an attorney, and 4 usability experts.

“I like this. This makes local issues very transparent” - User 30 (State Senate)

“This has the potential to make a huge impact” - User 31 (Attorney)

“You did a good job of making this user-centered” - User 35 (Usability expert)

Sample Size: 7
Presenting

Representation.org
Final Design - Key Features

A user will only be able to interact with bills that they can control.

“If your letter doesn’t have an address, they’ll throw it out. If the address isn’t within their district, out. If the address IS within their district, but it’s on a bill that they don’t control, out.” - Attorney
Final Design - Key Features

"For a longer bill I would have asked you, where are the highlights?" - User 2

The website crowdsources the summarization of bills.
Final Design - Key Features

The website generates a personal voting calendar for the user.

“I’ve always had trouble finding out when and where I am supposed to vote” – User 23
Final Design - Key Features

Users are able to elect candidates based on issues.

“I don’t want to hear their commercial, I just want to know how they’ve voted” – User 22
Users validated the first-click testing and expert evaluation revisions by completing set tasks and filling out a usability survey.

“The visual design is fantastic” – User 22

“I love the flow, it’s very intuitive” – User 27

“The sense of stepping through this process works really well.” – User 36

Sample Size: 20
Task 1: 
Find a bill that the you have influence over.

How long did the task take to complete?

How relevant is the bill to you?

How easy would it be to find a 2nd relevant bill?
**Task 2:**
Send feedback on a bill to the individual(s) with the power to affect its outcome.

How long did the task take to complete?

| minutes : seconds |

How actionable was your feedback?

- **actionable**
- **unusable**

How easy would it be to review a 2nd bill?

- **easy**
- **difficult**
Task 3:
*Plan ahead for the next election you are eligible for.*

How long did the task take to complete?

- **Final Design:** 1:08
- **Status Quo:** 5:38

How easy was it to find needed information?

- **Final Design:** Very easy
- **Status Quo:** Neither, Difficult, Very difficult

How likely is it that you will vote?

- **Final Design:** Very likely
- **Status Quo:** Very likely, Likely, Very unlikely

<table>
<thead>
<tr>
<th>Time</th>
<th>Final Design</th>
<th>Status Quo</th>
</tr>
</thead>
<tbody>
<tr>
<td>0:00</td>
<td>1:08</td>
<td>5:38</td>
</tr>
<tr>
<td>1:30</td>
<td></td>
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<td>3:00</td>
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<td>4:30</td>
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<td>6:00</td>
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<tr>
<td>7:30</td>
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Task 4:
*Determine who you would vote for between two candidates.*

How long did the task take to complete?

**minutes : seconds**

How easy was it to find needed information?

**easy** difficult

How confident do you feel in your selection?

**confident** unconfident

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**Usability Testing: 20 users**

<table>
<thead>
<tr>
<th>Task</th>
<th>Final Design</th>
<th>Status Quo</th>
</tr>
</thead>
<tbody>
<tr>
<td>How long did the task take to complete?</td>
<td>1:15</td>
<td>5:11</td>
</tr>
<tr>
<td>How easy was it to find needed information?</td>
<td>Very easy, Easy</td>
<td>Very easy, Difficult, Very difficult</td>
</tr>
<tr>
<td>How confident do you feel in your selection?</td>
<td>Very confident, Confident</td>
<td>Confident, Neither, Unconfident, Very unconfident</td>
</tr>
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</table>
There are no current solutions to help citizens make informed voting decisions for local government bills and elections.
Improving the usability of government bills may make citizen engagement and informed voting more accessible.
My Approach

This design creates a solution for those with the lowest voter turnout in the nation, using a user-centered design process.
Next Steps

This design streamlines the process of responding to a bill. The next steps are to streamline the process of running for an election.
This feature has the potential to give rise to candidates across the nation that could be elected without any money, power, or influence, but purely based on their views on issues.
How the citizen benefits

1. The ability to identify which bills in government that they have influence over with just a street address.

2. The ability to give feedback on a bill without having search for who to send it to.

3. The ability find the next election they are eligible for with just a street address.
How the representative benefits

1. The ability to know which lines of a bill their constituents agree and disagree with
2. The potential for a reduction in the amount of irrelevant feedback sent to them.
A note to future developers

1. This design is effective because it remains non-partisan. It is critical that future developers maintain this, or the value of the design becomes compromised.

2. I think by first developing the feature that lets users know when their next eligible election is, this would be the best initial platform.
Thank you!

I would love to hear your feedback.

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References


All images - unsplash.com
All icon - nounproject.com